

## On the *Stueningia* species in Turkey (*Lepidoptera*, *Geometridae*)

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**Abstract:** On the *Stueningia* species in Turkey (*Lepidoptera*, *Geometridae*). *Cesa News* 151: 1-3, 2  
figs. 1 map

In this paper, distributions and occurrence of two endemic species of *Stueningia* Hausm. in the tribe  
*Macariini* (*Geometridae*) are discussed. *Stueningia wolfi* is reported here as new for the fauna of  
Van Province (East Turkey). Adult and male genitalia are illustrated. A map for two species is  
added.

**Keywords:** *Lepidoptera*, *Geometridae*, *Macariini*, *Stueningia*, *wolfi*, *taurica*, *sertelorum*, fauna,  
Van, Turkey.

During an excursion in southern Van Province within the private research project on the  
*Lepidoptera* fauna of Turkey, a single male of *Stueningia wolfi* was collected by day in the last year.  
This record was the first one in Van Province, but faunistically important to come out in a place  
very far from the type-locality, Karapınar (Central Anatolia) (**Map 1**). This new locality supports, at  
the same time, the validity of *Stueningia taurica* Hausm. as a distinct species.

***Ennominae* Duponchel,[1845]**

***Macariini* Guenée,[1858]**

***Stueningia* Hausmann,1993**

This genus, classified currently in the *Macariini* tribe (Skou & Sihvonen,2015), is represented  
by two species. Both of them are apparently endemics for Turkey.

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e-mail: [muhabbet\\_kemal@yahoo.com.tr](mailto:muhabbet_kemal@yahoo.com.tr) - co-author: Prof. em. Dr. Ahmet Ömer Koçak, c/o Van Yüzüncü Yıl University, Faculty of  
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***Stueningia wolfi* Hausmann, 1993****(Figs. 1, 2; Map 1)**Synonym: *wolfi* Hausmann, 1993Original Reference: *Stueningia wolfi* Hausmann, 1993, *Bonn. zool. Beitr.* 44 (3/4): 230-232, Abb.1. Holotype ♂: Türkei: S. Anatolien, Karapınar, 995m, 12.vi.69, leg. G. Friedel (ZSM).Range (in code): TR 01 07 33 42 65 01H 01J 07A 07C 33P 42J 42O 65D 65Dx (Koçak & Kemal, 2017)Material examined: 1♂, GP2818. East Turkey, Van Province, Çatak, Elmacı 1760m (65Dx), on 30.6.2016, diurnal, M. Kemal & A. Koçak leg. (Cesa).This species occurs sympatrically with *Choreutis muhabbet* Koçak (*Choreutidae*) at the same place.***Stueningia taurica* Hausmann, 1993****(Map 1)**

This species is represented by two subspecies.

***Stueningia taurica* ssp. *taurica* Hausmann, 1993**Synonym: *taurica* Hausmann, 1993Original Reference: *Stueningia wolfi* ssp. *taurica* Hausmann, 1993, *Bonn. zool. Beitr.* 44 (3/4): 230-232, Abb.1. Holotype ♂: Türkei: S. Anatolien, Karapınar, 995m, 12.vi.69, leg. G. Friedel (ZSM).Range (in code): TR 31 46 31K 31Ka3 46G***Stueningia taurica* ssp. *sertelorum* Kemal & Koçak, 2015**Synonym: *sertelorum* Kemal & Koçak, 2015Original Reference: *Stueningia taurica* ssp. *sertelorum* Kemal & Koçak, 2015, *Cesa News* 119: 4-6, figs. Holotype ♂. South Turkey, Hatay Pr., Samandağ, Meydan, Karabucak 35m, 9.5.2015, M. Kemal & A. Ö. Koçak leg. (coll. Cesa).Range (in code): TR 31 31K 31Ka3

The name *taurica* was originally proposed by Hausmann as a valid name of a subspecies of *Stueningia wolfi*; however, the status of the taxon was changed by the authors to the species with the same name (Kemal & Koçak, 2015). The southernmost population of *Stueningia taurica* was described as a distinct subspecies, ssp. *sertelorum* (Map 1). Distribution of *Stueningia taurica* Hausm. is confined to the mountainous area between Kahramanmaraş and Hatay Provinces in South Turkey. On the other hand, the species *Stueningia wolfi* Hausmann confined Taurus Mountain Range in South Turkey on both sides, namely southern and northern parts of the Range, up to the present paper. It may be zoogeographically considered as an East Mediterranean element. The possibility of spreading of this species to a wider area in the southern mountainous region of Van Province is probable, provided that it inhabits in hot valleys of the lowland. The present single record of *Stueningia wolfi* in Çatak (Van Prov.) may be considered reasonable, and its richer populations are more likely to be found in further southerly locations.

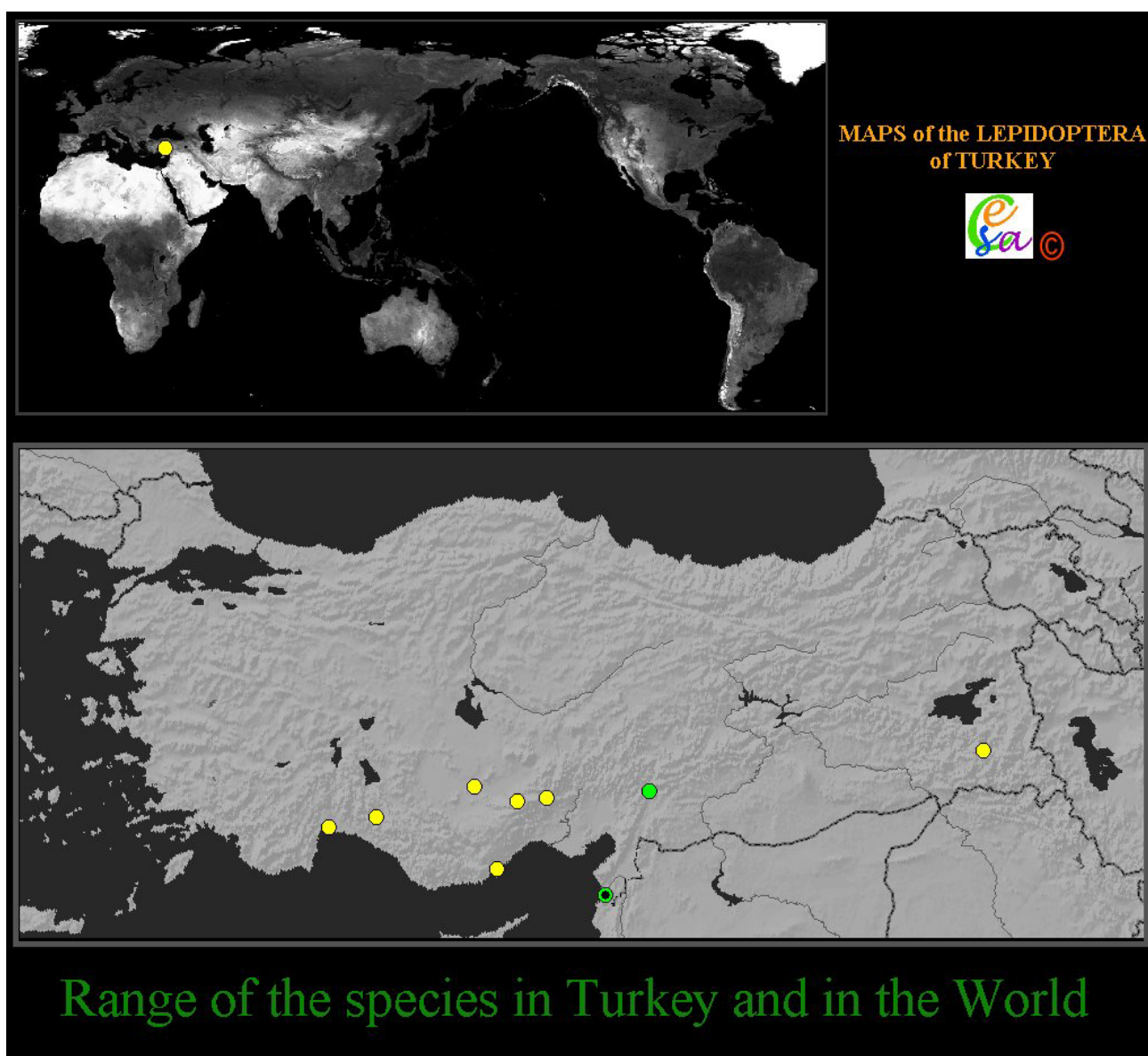
When commenting on the morphological characteristics of the male genitalia of *S. wolfi* (western populations) and the specimen from Van are evaluated, there is no difference at species level. However, more material should be collected and examined for the investigations at subspecific level. Shape of the bicuspid valvular process may be important in this respect.

**References**

- Hausmann, A.**, 1993, Beitrag zur Taxonomie und Systematik des Gnophos poggearia Lederer, 1855 Verwandtschaftskreises (Lepidoptera, Geometridae, Ennominae). *Bonn. zool. Beitr.* 44 (3/4): 225-240, Abb.
- Kemal, M. & A. Ö. Koçak**, 2015, Notes on two species of Geometridae from Hatay Province (S. Turkey) (Lepidoptera). *Cesa News* 119: 1-6, 7 figs.
- Koçak, A. Ö. & M. Kemal**, 2017, Geographical codes used in the publications of the Cesa. *Cesa News* 135: 1-40.
- Skou, P. & P. Sihvonen**, 2015, *The geometrid moths of Europe*. Volume 5 Ennominae I. 657S. Brill & Leiden.



**Figs. 1, 2** – *Stueningia wolffi*. Upperside of male, and its genitalia. GP2818. East Turkey, Van Prov. Çatak, Elmacı 1760m (65Dx), 30 6 2016, M. Kemal (Cesa)



**Map 1** – Distribution of *Stueningia* species in Turkey: *S. wolffi* Hausm. (yellow), and *S. taurica* Hausm. (green). *S. taurica* ssp. *taurica* Hausm. (green), *S. taurica* ssp. *sertelorum* Kemal & Koçak (black centered green), A. Koçak (Cesa)

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